

Glen Canyon Dam Adaptive Management Work Group
Agenda Item Information
April 29-30, 2009

Agenda Item

Lees Ferry Trout Fishery Ad Hoc Group Update

Action Requested

√ Information item. No action requested.

Presenters

Sam Spiller (Co-Chair, Lees Ferry Trout Fishery Ad Hoc Group), Lower Colorado River
Coordinator, U.S. Fish and Wildlife Service

Mike Senn (Co-Chair, Lees Ferry Trout Fishery Ad Hoc Group), Assistant Director, Arizona Game
and Fish Department

Previous Action Taken

√ Other:

The Bureau of Reclamation executed an experimental high flow test of approximately 41,500 cfs for 60 hours beginning March 4, 2008. Prior to that test, on February 29, 2008, Reclamation completed an Environmental Assessment (EA) for the proposed action. The EA describes Mitigation Measures that were to be conducted, including Reclamation's agreement to "... work with the [Fish and Wildlife Service], [National Park Service], and [Arizona Game and Fish Department] to propose measures within the GCDAMP [Glen Canyon Dam Adaptive Management Program] dedicated to improving communication between management agencies and the angling guides, dependent local businesses, and the public. These proposed measures include creation of an ad hoc group within the GCDAMP to facilitate discussion among trout fishing guides and anglers, Marble Canyon business owners, recreational rafting companies, and other interested parties regarding proposed experimental actions affecting these resources . . ." The final EA and the FONSI, along with public comments received and other pertinent documents, can be found at <http://www.usbr.gov/uc/envdocs/ea/gc/2008hfe/index.html>.

√ By AMWG:

At its May 2008 meeting, AMWG passed the following motion by consensus:

That the AMWG form a "Lees Ferry Trout Fishery Ad Hoc Group" to make a recommendation to the AMWG by its next meeting on the following two Environmental Assessment (EA) mitigation commitment items:

1. How the AMWG, consistent with the EA, might facilitate discussion among trout fishing guides and anglers, Marble Canyon business owners, recreational rafting companies, and other interested parties regarding proposed experimental actions affecting these resources, to include a projected schedule for meetings, cost-effective location, and whether Federal and State agencies should serve as support to the work of this ad hoc group, and
2. Whether and how AMWG should be involved in updating the Lees Ferry Trout Management Plan, including whether the AMP should sponsor workshops that could be

used to help develop the specific aspects of the management plan, and including an assessment of work, projected schedule, and cost-effective locations.

Relevant Science

- √ The following describes the relevant research or monitoring on this subject:
See the SCORE report at <http://www.gcmrc.gov/products/score/2005/score.htm>.

Background Information

On February 20, 2009, the Arizona Game and Fish Department (AZGFD) led a meeting with the Marble Canyon Business Community that included fishing interests. Also in attendance and supporting this meeting were the Fish and Wildlife Service, Glen Canyon National Recreation Area, and Grand Canyon Monitoring and Research Center. Minutes of that meeting are attached to this Agenda Item Information report.

No other work has been carried out in response to motions of the AMWG noted above due to AZGFD's offer at the September 2008 AMWG meeting to conduct this meeting with the fishing interests at Marble Canyon.

MARBLE CANYON BUSINESS COMMUNITY MEETING, February 20, 2009 @ Marble Canyon Lodge, Marble Canyon, AZ: notes

Attendees: Lees Ferry Anglers - Terry Gunn, Jeff English, Skip Dixon, Natalie Jensen, and Luke Blaser; Arizona Game and Fish Department – Andy Makinster, Scott Rogers, Ron Sieg, Bill Persons, Larry Riley, Rory Aikens, and Matt Hangsleben; U.S. Geological Survey – Ted Kennedy; National Park Service - Mark Anderson; and U.S. Fish and Wildlife Service – Sam Spiller.

ANGLER PERCEPTION AND RESULTING ECONOMIC IMPACTS IN REGARD TO THE 2008 EARLY MARCH HIGH FLOW TEST AND FALL STEADY FLOW EXPERIMENTS AND RESULTING STUDIES, FISHING SUCCESS, ETC:

GUIDES COMMENTS ON HIGH FLOW EXPERIMENTS:

The 2008 early March High Flow Test and Fall Steady Flow Experiment did not have the negative biological and financial impacts that occurred following the previous 2004 November High Flow Test. However, several guided fishing trips were cancelled during the March High Flow Test. This included daily raft trips from Glen Canyon Dam to Lees Ferry and expenses incurred to move or remove boats at the dam due to the High Flow Test.

It appears that the 2008 early March High Flow Test may have either caused or added to an increased spawning period; perhaps trout were staging during February and the early March High Flow Test increased spawning.

Some of the best fishing occurred after the 2008 March High Flow Test.

The High Flow Experiment may have cleaned gravel and increased spawning success.

Management recommendations provided by the guides to sustain trout fishery: High flow tests should be conducted as early in late winter as possible and no later than end of February. They should occur prior to the spring and summer aquatic food base growing season and before late February and early March to have less impact on commercial businesses if anglers cancel trips. Perhaps early in February is the optimum time to have High Flow Tests to avoid negative economic consequences.

GUIDES COMMENTS ON 2008 FALL STEADY FLOW EXPERIMENT (SEPTEMBER 1-OCTOBER 31, 2008):

2008 Fall Steady Flows do not appear to have been harmful, probably because they were high steady flows. Guides requested steady flows above 8,000 cubic feet per second (cfs); 12,000 cfs is a preferable flow elevation for the September and October steady flows.

By having 2008 Fall Steady Flows at approximately 12,000 cfs, the “green line” was kept up; the “green line” representing the delineation of upper extent of sustained algal growth for food base maintenance.

The 2008 Fall Steady Flows increased recruitment, survival, and sustained the food base.

Concern was expressed that future September-October steady flows at 8000 cfs discharge or below could result in a crash of the trout population due to degradation of the food base, especially given the current densities of young fish at Lees Ferry.

Management recommendations provided by the guides to sustain trout fishery: Based on the positive responses of trout, fall steady flows should be maintained at not less than 10,000 cfs.

OTHER GENERAL PERCEPTIONS OF FISHERY PROVIDED BY THE GUIDES AND ATTENDING AGENCIES:

It should be noted that the Lees Ferry trout fishery is a “wild” self-sustaining, natural reproducing trout fishery and should be marketed as such.

Fishermen without guides are not having successful trips.

Management thoughts as to increasing trout fishing success: Stress that the Lees Ferry fishery is a “wild” self-sustaining, natural reproducing trout fishery in public information statements. Continue to strive to run public information pieces to increase knowledge as to how to be successful fishing Lees Ferry. Information should generally indicate that the early March 2008 High Flow Test and Fall Steady Flow Experiment have resulted in good fishing based on February 2009 reports. However, fishing tactics and strategy have changed in recent years, and many anglers have difficulty catching fish.

Points of discussion and/or questions that may need to be further addressed:

Did the early March 2008 High Flow Test build beaches, how soon did erosion of them occur, and how long did the investment of new sand last?

The Lees Ferry trout displacement study in 2008 did not show significant displacement of trout as a result of the March 2008 High Flow Test. Arizona Game and Fish Department (AZGFD) indicated that the Grand Canyon Monitoring and Research Center (GCMRC) tagged trout of all sizes and they generally remained in the area they were tagged.

March 18, 2008 AZGFD studies of large trout indicate that they were in good physical shape and stomachs full of scuds and worms (Chironomids). Small trout exhibited some signs of possible stress from the high flow test but recovered and were in good condition by summer.

The GCMRC gave updates on the food base studies. It does not appear that the March 2008 High Flow Experiment had a major negative impact on the aquatic food base in Lees Ferry. GCMRC further noted that Cladocerans (*Daphnia* spp.) were a major food item during the winter (2008-09); this may be due to their availability in low Lake Powell waters at the levels of discharge downriver through the dam.

The AZGFD should examine the creel data from 2008 to see if angler catch rates increased from previous years as the trout population has increased.